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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,462	11/12/2003	Kei Masuda	116943	5737

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EXAMINER

TRIEU, THAI BA

ART UNIT PAPER NUMBER

3748

DATE MAILED: 07/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/705,462	<b>Applicant(s)</b> MASUDA, KEI	
	<b>Examiner</b> Thai-Ba Trieu	<b>Art Unit</b> 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/12/03 &amp; 03/18/04</u> . | 6) <input type="checkbox"/> Other: ____  |

### DETAILED ACTION

Receipt is acknowledged of papers submitted under 35 U.S.C. 119 (a)-(d), which papers have been placed of record in the file.

#### *Specification*

The disclosure is objected to because of the following informalities:

- On Page 6, Paragraph [0018], line 8, "**throttle valve 18**" should be replaced by -- **throttle valve 13** -- (for correcting typo error).

Appropriate correction is required.

#### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 5, 10, and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically,

1. In claim 1, line 5; claim 5, line 5; claim 10, line 4; and claim 14, line 4, the recitation of "can increase" render that claim indefinite, since it is not clear that under which condition an electric motor increases a supercharging pressure, and under which condition the electric motor does not increase a supercharging pressure.

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Because the independent claims 1, 5, 10, and 14 are rejected, the dependent claims 2-4, 6-9, 11-13, and 15-18 are also rejected under 35 U.S.C. 112, second paragraph

2. Claim 5 recites the limitation "the detected value" in line 13. There is insufficient antecedent basis for this limitation in the claim.

3. Claim 14 recites the limitation "the detected value" in line 15. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claims 1-5, 7-14, and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Muraji (Patent Number EP 0 420 704 A1 or US Patent Number 5,088,286).***

**Regarding claims 1-5 and 7-9,** Muraji discloses a control device for a turbocharger with an electric motor, comprising:

a turbocharger (2) which is provided along with an internal combustion engine (1) and supercharges air taken in the internal combustion engine (1) using a compressor (2a);

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an electric motor (3) which can increase a supercharging pressure by running the compressor (2a) of the turbocharger (2); and

a controller (6) which calculates a base amount of electric power to be supplied to the electric motor based on a target supercharging pressure and an actual supercharging pressure (See Column 5, lines 20-43); decides an amount of electric power to be supplied to the electric motor (3) (See Abstract; Column 5, lines 44-58, and Column 6, lines 1-3); controls the electric motor based on the decided amount of electric power to be supplied (Column 5, lines 44-58, and Column 6, lines 1-3); and sets the amount of electric power to be supplied to a maximum amount of electric power in a beginning state of an electric power supply to the electric motor and in a state where a detected value is equal or higher than a predetermined value, regardless of the calculated base amount of electric power (See Figures 1-2 and 5-6; Abstract, Column 2, lines 44-55, Column 3, lines 1-23, Column 5, lines 21-58, and Column 6, lines 1-49);

wherein the controller stops making the amount of electric power to be supplied the maximum amount of electric power, when the actual supercharging pressure exceeds the target supercharging pressure after the maximum amount of electric power is supplied to the electric motor (See Figures 1-2 and 5-6; Abstract, Column 2, lines 44-55, Column 3, lines 1-23, Column 5, lines 44-58, and Column 6, lines 1-49);

wherein the controller stops making the amount of electric power to be supplied the maximum amount of electric power, and then, as the amount of electric power gradually falls from the maximum amount, progressively makes that gradually decreasing amount of electric power the amount of power to be supplied (See Figures

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1-2 and 5-6; Abstract, Column 2, lines 44-55, Column 3, lines 1-23, Column 5, lines 44-58, and Column 6, lines 1-3);

wherein the controller sets the amount of electric power to be supplied to the base amount of electric power, when the actual supercharging pressure becomes equal to or lower than the target supercharging pressure while the amount of electric power is being gradually decreased (See Figures 1-2 and 5-6; Column 5, lines 21-43).

**Regarding claims 10-14 and 16-18**, the method as claimed would be inherent during the normal use and operating of the Muraji device as disclosed (See Figures 1-2 and 5-6; Abstract, Column 2, lines 44-55, Column 3, lines 1-23, Column 5, lines 21-58, and Column 6, lines 1-49).

#### ***Allowable Subject Matter***

Claims **6 and 15** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

The IDS (PTO-1449) filed on November 12, 2003 and March 18, 2004 have been considered. Each initialized copy is attached hereto.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Allen et al. (US Patent Number 6,705,084 B2) disclose a control system for electric assisted turbocharger.
- Kawamura (US Patent Number 4,901,530) discloses a device for controlling turbocharger with a rotary electric machine.
- Kawamura (US Patent Number 4,894,991) discloses a control system for an internal combustion engine with a turbocharger.
- Kawamura (US Patent Number 4,882,905) discloses a device for controlling turbocharger with a rotary electric machine.
- Kawamura (US Patent Number 4,878,347) discloses a device for controlling turbocharger with a rotary electric machine.
- Kawamura (US Patent Number 4,850,193) discloses a control system for a turbocharger with a rotary electric machine.
- Kiuchi et al. (US Patent Number 5,750,137) disclose a control system for an electric generating apparatus on a vehicle.
- Muraji (Patent Number JP 03202630 A) discloses a control device for a turbocharger with a rotary electric machine.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (703) 308-6450. The examiner can normally be reached on Monday - Thursday (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (703) 308-2623. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTB  
July 13, 2004



Thai-Ba Trieu  
Patent Examiner  
Art Unit 3748